

the 50,000-75,000 new lines that many companies are projected to provision each quarter by year-end.

The goal is a fully integrated and scalable system that manages the process from the initial sales call to order entry, provisioning, trouble ticketing and production of the first bill. CLECs that have not addressed this issue with a long-term solution will likely pay the price in the future.

### ***Acquisitions***

Due to the high operating leverage of telecommunications services, a focused acquisition strategy designed to build scale in selected markets makes sense. Network synergies are generally high in instances where an acquired company has geographic overlap and relatively few facilities. Further savings often come from combining administrative functions while increased revenue growth results from cross-selling opportunities and better leverage of the sales force. These synergies often provide justification for the premiums to fair value sometimes paid by acquirers.

There are risks associated with this strategy, however. From an operational standpoint, integration of two companies' personnel and customer support systems can take time. This can distract the management and employees of the acquired company, potentially slowing its growth. In these cases, what seemed like a reasonable premium paid for a 20% grower may be too high when in fact the purchased company is growing at a slower clip.

We prefer acquisitions that enhance a company's ability to provision high-margin data services or contribute to growth in access lines at a reasonable price. Acquisitions that add nonstrategic or low-margin revenues and provide little other strategic value are less attractive.

We believe it is tempting for managers of growing companies that trade at high multiples to use stock to buy companies at lower multiples as a quick way to gain scale even though it may mean overpaying. This is the quickest way for the acquirer to become a low-multiple company itself. Because of these factors, we believe CLECs that make frequent acquisitions generally offer investors greater risk.

### ***Management***

The local service environment is a complex, constantly evolving marketplace that requires years of experience to fully understand. Effective managers need a full under-

standing of incumbent networks and systems, new technology, sales and marketing and the contacts within the industry to help get things done.

The CLEC industry has existed for only about two years and there is no road map to follow that will ensure success for these new competitors. Therefore, a strong management team is key to success. The best way to evaluate management is by the degree of success the individuals have had in the past at similar positions in the telecom industry.

### ***Valuation***

The basis for our recommendations is a discounted cash flow analysis employing a largely consistent cost of capital and terminal multiple. Using free cash flow as the basis for determining economic return to providers of capital, we determine the risk-weighted present value of expected cash flow.

At this stage in their development, the CLECs are generating large free cash flow deficits and are expected to continue to do so for two to five years. Therefore, the vast majority of value is generated in the outer years, specifically in the terminal value. Considering the rapid growth of this industry, the myriad of new technologies that continue to emerge and potential changes in the regulatory climate, estimates of future cash flow are uncertain at best. Slight modifications to year 2005 projections can cause large fluctuations in valuation and disguise what look to be good investments.

This situation stresses the need for a complete evaluation of the each company's fundamental strategy and places a premium on effective management. It also forces us to focus on comparisons within the group to determine relative value among CLECs.

We examine each company's enterprise value multiple of revenue, EBITDA, PP&E and other relevant factors. Regardless of the accuracy of the projections, this method is not exceedingly reliable on its own due to the differences in each company's capital intensity and future cash requirements, quality of revenues, and other factors that make for a good investment. This method, however, allows us to examine each company relative to others and forces us to take the extra step to consider why a company should receive a premium or discount to the group.

## Intermedia Communications

Rating: Buy

Price target: \$50

### Highlights

- As the fifth-largest nationwide provider of frame relay services, Intermedia is the independent CLEC best positioned to take advantage of the continued growth in data communications. The RBOCs' lack of inter-LATA data capabilities combined with the company's agreement to carry US West's and Ameritech's inter-LATA frame relay traffic, makes Intermedia an attractive acquisition candidate.
- Intermedia trades at a discount to its peers with regard to revenue, EBITDA and PP&E multiples. Considering the company's high growth rate, our expectations for positive EBITDA in the second quarter, and its strategic asset base, we believe this discount is unwarranted and should correct as the strategic nature of the company's assets receives investor attention.
- We believe Intermedia's efforts to integrate the operations of its four recent acquisitions will have a positive effect on the company's results in late 1998 and in 1999. We also expect to begin to see the benefits of the company's frame relay agreements with Ameritech and US West during this period.
- We initiated coverage of Intermedia with a Buy rating and a price target of \$50 per share based on our discounted cash flow model. This price target is likely to be realized through the continued execution of the company's business plan and the increased likelihood that the company will become a takeover target as larger services providers focus their attention on inter-LATA voice and data services.

7/16 price \$41 3/16 OTC—ICIX 52-week range \$15 3/16 - \$45 5/8

FY EPS	1997	1998E	1999E
Q1	\$(0.94)	\$(3.03)	—
Q2	(1.19)	(2.70)	—
Q3	(1.62)	(2.26)	—
Q4	(1.61)	(2.09)	—
Year	\$(5.36)	\$(10.08)	\$(7.14)
P/E	—	—	—
Div	—	—	—
Yield	—	—	—
Secular Growth Rate	40%		

**Company description:** Intermedia Communications is competitive local exchange carrier that provides voice and data services to business customers in over 80 cities nationwide.

### Overview

Intermedia Communications is a CLEC based in Tampa, Florida, with operations in 81 cities nationwide. At the end of the first quarter of 1998, the company serviced over 220,000 access line equivalents (ALEs)<sup>1</sup>, while its data-focused strategy has made it the fifth-largest national provider of frame relay service in the United States.

Figure 23

### Switched voice markets, 1Q98

Atlanta	Miami
Charlotte	New York City
Chicago	Orlando
Cincinnati	Philadelphia
Dallas	Raleigh
Houston	Shreveport
Jackson	St. Louis
Los Angeles	Tampa
Memphis	

Source: PaineWebber and company published data.

Intermedia has installed voice switches in 19 major cities, predominately in the Southeast, and plans to have 35 in place by 2000. The company targets small and medium-sized businesses with a bundled offering of local, long-distance, Internet access and other enterprise data products from sales offices located in 47 markets around the country. In many of these markets, the company sells a combination of enterprise data and resold voice services, building scale until the economics warrant deployment of a Class 5 switch. Intermedia's management has a strong telecommunications and technology background ideally suited for the new role service providers are being asked to play.

### Investment case

*Intermedia trades at 23x our 1999 EBITDA estimate of \$188 million.* We are projecting that the company will report positive cash flow in the second quarter of 1998 and will subsequently grow EBITDA 34% annually from 1999 to 2005. The company trades at an enterprise value to estimated 1999 revenue multiple of 4.2x, compared with 4.4x for the group. This continues to make Intermedia good value relative to the group despite the rebound in its share price.

<sup>1</sup> Trunk lines are counted as 2.5 ALEs. Lines gained in the STF transaction are calculated based on the number of phone terminals connected.

*The company's frame relay network is a "one of a kind" asset in the under-\$10 billion class. Companies with comparable frame relay franchises, such as Sprint, AT&T and MCI, have market capitalizations of over \$20 billion. Intermedia's agreement to carry US West's and Ameritech's interLATA frame relay traffic should increase the growth of high-margin enterprise data revenue and add to the strategic value of the company. The opportunity for similar agreements with the remaining RBOCs could improve the company's value as a provider of data services.*

*Intermedia's mature CLEC network in the Southeast United States makes it an attractive acquisition candidate as consolidation of large telecom providers continues. Only e.spire has coverage rivaling Intermedia's broad footprint in the southern part of the country. As part of the proposed SBC/Ameritech merger, the combined company has stated its intention to compete as a CLEC in 20 of the markets in which Intermedia operates. SBC's history of acquisitions makes us believe the new entity will buy its way into these markets. The RBOCs lack of data capabilities and the frame relay agreements Intermedia has put together make the company a primary candidate for consolidation by the new SBC/Ameritech entity or a competing company hoping to head off SBC/Ameritech efforts.*

## Strategic assessment

*Data-intensive product offering*—No other company its size can offer Intermedia's full range of voice, data and Internet services on a nationwide basis. Only WorldCom (and soon AT&T with its acquisition of Teleport) can match the company's combination of data and Internet capabilities plus long-haul capacity and local market presence.

Intermedia's data focus positions the company to capitalize on this trend while attacking the weakest aspect of the incumbent's product offering. The company's most successful data service is frame relay, which it began providing in 1992. The company's network includes 150 Cascade switches, three times the number of its next closest independent CLEC competitor. At the end of the first quarter of 1998, the company had 22,789 nodes in service and provided network access to customers in over 4,000 cities, putting it in a class with Sprint, MCI and AT&T. No other CLEC has a comparable network.

*Smart-build network strategy*—Management realized early that laying fiber in downtown urban areas was expensive and largely unnecessary as the company rapidly moved into new markets. Thanks to the Telecom Act, local transport can be leased from incumbent providers at attractive rates. Because of this, Intermedia has been less

aggressive in deploying fiber infrastructure. As each of Intermedia's markets matures, however, the company can install fiber on a case-by-case basis if the economics become justifiable. In contrast, ownership of the switching infrastructure is critical, providing carriers with advantageous economics while preserving the ability to earn high returns on invested capital. Many other CLECs are following Intermedia's lead by leasing local fiber in the early stages of market development.

Long term, however, we believe Intermedia is best served by owning all the elements of its network. Its recent agreement to lease capacity from Metromedia Fiber Networks in New York, Washington, Philadelphia and Chicago is a step in this direction. MFN is a wholesale provider of local network capacity along the eastern seaboard and Chicago.

Intermedia has taken a similar approach in establishing its long-haul network. The company is in the process of upgrading its ATM backbone from OC-3 to OC-48. Long-haul capacity to support this network and carry the company's inter-exchange traffic has been secured through an attractive agreement with Williams. In the agreement, Intermedia acquired a 20-year indefeasible right of use to fiber capacity at data rates up to OC-192, depending on the level required by Intermedia. The terms require Williams to manage Intermedia's conversion to the new network and provide incentives for migrating the company's traffic more quickly. The upgrade is expected to be complete by the first quarter of 1999.

*First with a single-circuit approach*—All access lines in the ten markets where switching infrastructure has been deployed run on T1s leased from the ILEC. This will continue to be the company's strategy as it moves to offer switched services in 35 markets by year-end 2000. The company can economically install a T1 for a customer where it provides service to at least five lines. The additional capacity can be used to provide data services.

In combining voice and data services over a single circuit, Intermedia's solution lowers the cost of service by eliminating the need for distinct lines for wide area networks and PBX trunks. It also provides a way to avoid paying state proxy rates for unbundled loops. These proxy rates range from approximately \$10 to \$25 per month per line. Intermedia can lease T1s (each with the capacity for 24 business lines) in COs where it has collocation for as little as \$150 per month depending on the market. The cost advantage of this approach will increase as competition and the availability of digital subscriber line technology drives T1 prices lower.

Equipment costs are also reduced. In deploying an integrated access device, which combines the functionality of an IP router, CSU/DSU and channel bank, the customer is no longer required to lease each of these elements separately. The combined network also reduces support and maintenance requirements, providing further savings for Intermedia's customers. We estimate this approach will save 20-60% of telecommunications costs for small and medium-sized businesses depending on the type of services selected.

In Figure 24, we explain the benefits of a single-circuit approach. The model assumes a small business customer pays \$16 per line in flat-rate monthly service charges, \$270 per month in fixed and usage-based ISDN expenses, and \$2,050 in long-distance and local toll. Under the Single T solution, the number of lines that are maintained only for redundancy can be reduced from 20 to five. A T1 line is leased by Intermedia for approximately \$150-300 per month and installed at the customer site with a markup. This alone alleviates the need for an ISDN line and reduces LEC expenses by a total of \$260 per month.

The bulk of the savings is related to access charges. The T1 co-mingles data and voice signals that can be sent directly into Intermedia's long-haul network without touching ILEC facilities. In this example, total savings for the customer for service alone are \$875 or 33% per month. Additional savings would come from equipment leasing, as the Single T approach alleviates the need for an IP router, CSU/DSU and channel bank.

For Intermedia, this approach is likely to produce lower customer churn, as it ties voice services to the provision of data services, which have inherently higher switching costs. The company is using a device from VINA Technologies called the "T1 Integrator." The box is remotely programmable, allowing Intermedia to provide service upgrades and many customer-support functions without expensive truck rolls.

Figure 24

### An example of "Single T" economics

#### Conventional ILEC Approach

Monthly line costs (20 lines)	\$320
ISDN line (monthly fixed)	30
ISDN line (monthly usage) <sup>1</sup>	240
Long distance <sup>2</sup>	1,600
Local toll	450
Total monthly telecom costs	\$2,640

<sup>1</sup> Assumes \$0.02 per minute, 10 hours per day, 20 days per month

<sup>2</sup> Assumes 40 MOU per line per day, 20 days per month, \$0.10 per MOU

#### "Single T" Solution

Monthly line costs (5 lines for redundancy)	\$80
T1 line	250
Long distance <sup>3</sup>	1,120
Local toll <sup>3</sup>	315
Total monthly telecom costs	\$1,765

<sup>3</sup> Assumes 30% savings based on originating access charge avoidance.

#### Savings

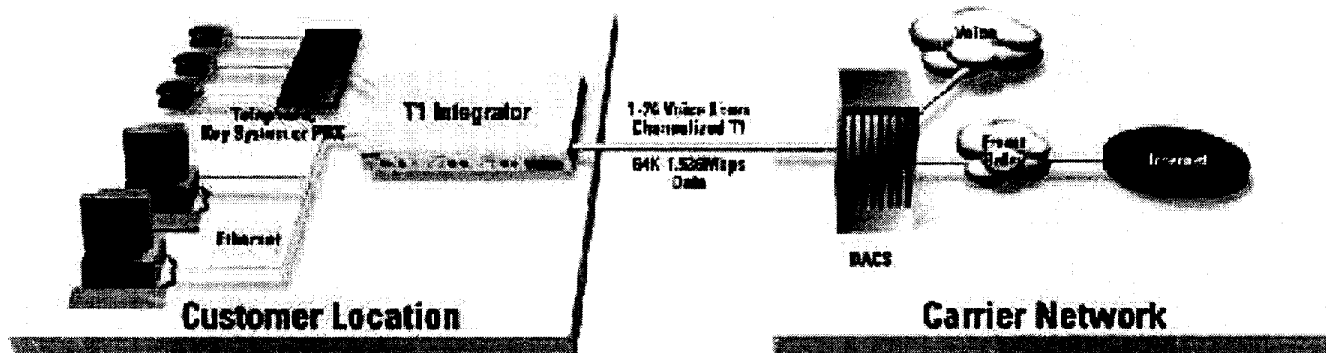
LEC charges	\$260
IXC charges	615
Total monthly telecom costs	\$875
% savings (recurring)	33%

Source: PaineWebber, VINA Technologies and company data.

For larger customers that need higher-speed connectivity, Intermedia is deploying a platform that will allow the company to deliver fractional T3 bandwidth inexpensively by inverse multiplexing two T1 lines. This platform will dramatically lower the company's per DS0 line costs and ease the transition from circuit- to cell-based services. In the future, Intermedia plans to use IP over ATM circuits to offer next-generation services in a fully packetized environment. Management believes this architecture will give the company a sizable cost advantage over similar services offered with the conventional circuit-switched technology of the ILECs.

Figure 25

## Network topology of Intermedia's "Single T" solution



Source: VINA Technologies.

**Acquisition strategy**—In the past 12 months, Intermedia has undertaken four transactions to improve its strategic position and further leverage its network. Below we provide more details of each transaction:

- **DIGEX**—In June 1997, Intermedia agreed to acquire DIGEX, a leading Internet service provider, for \$175 million in cash and stock. The acquisition expanded the company's data service capabilities, provided cross-selling opportunities and gave Intermedia control of one of the few remaining independent national Internet backbones.
- **Shared Technology Fairchild (STF)**—In November 1997, the company agreed to pay \$640 million in cash and assumed debt, or 3.5x LQA revenues, for this provider of shared tenant services. STF provided low-end PBX service to 15,000 small and medium-sized business customers in 463 buildings primarily in the eastern United States. The acquisition gave Intermedia 111,600 new ALEs in service and an addressable market opportunity of 350,000 additional lines, representing an estimated \$400 million in potential revenue. This revenue opportunity can be exploited with little incremental capital expense. The STF deal closed in early March.
- **Long-distance Savers (LDS)**—In December 1997, Intermedia entered into an agreement to acquire LDS, a long-distance reseller with over 45,000 business customers in Texas, Louisiana, Mississippi and Oklahoma. The acquisition allowed the company to build its customer base, sales staff and market penetration in these areas a year earlier than it had planned. The company paid approximately \$59 million in cash, assumed \$3 million in debt and issued approximately 1.5 million shares equal to \$89 million for a total con-

sideration of \$151 million. The deal closed in April and the acquired company's results will be consolidated for the second quarter of 1998.

- **National Telecommunications of Florida (NTF)**—In April 1998, the company agreed to add NTF to its list of recent acquisitions. Intermedia paid approximately \$151 million, or 2.4x LQA revenues, for this Florida-based long-distance reseller with a burgeoning local service business. The company gains approximately 18,000 local access lines, more than 11,000 business customers and a 1% share of the Florida long-distance market, cementing its position as the leading alternative provider of local and long-distance services in the state.

Combined synergies from these acquisitions are expected to be over \$30 million per year by 2000. Nonrecurring synergies of almost \$20 million are expected as well, mainly in the form of hiring and training efficiencies and capital expenditure offsets. For example, LDS and NTF both had Nortel DMS-500 switches that will add needed capacity to Intermedia's network. Pro forma for the close of the first quarter (including the NTF acquisition), the company had 238,918 ALEs in service, 564 sales personnel and over 95,000 business customers.

### Management assessment

The management team at Intermedia does not come from a mainstream telecommunications background.

Chairman and CEO David Ruberg was an executive vice president of Data General Corporation where he oversaw the personal computer and systems integration divisions. He has been CEO since May 1993 and chairman since March 1994.

Robert Manning, the chief financial officer, has been with Intermedia since September 1996. To date, he has guided the company through \$2.2 billion in public financings and six acquisitions. Prior to joining the company, Mr. Manning spent five years with DMX Inc., a Los Angeles-based cable programmer, and ten years with Oppenheimer and Co. in its corporate finance area.

Robert Rouse, executive vice president of operations, engineering and information services, joined the company in 1996 from Concert, where he was senior vice president from 1991 to 1996. Prior to this, Mr. Rouse held various executive level positions with MCI from 1986 to 1991.

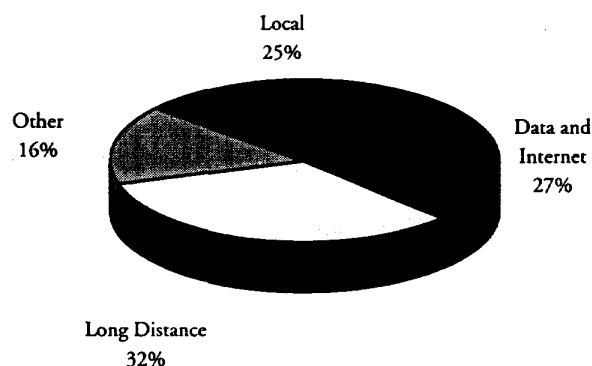
James F. Geiger, senior vice president of sales and marketing, heads the sales effort and has been with the company since March 1995. Prior to this he was a founding principal of FiberNet. Before 1990, Mr. Geiger held various sales and marketing positions at Frontier.

### Financial assessment

In the first quarter of 1998, 32% of Intermedia's revenue was generated by long-distance service, 27% came from data and Internet service, and 25% came from local service provision. Local voice service is growing the fastest and is expected to represent 28% of revenues in 1998 and over 40% in 2000 when we expect the company to have over 650,000 ALEs in service.

Figure 26

### Intermedia's revenue mix, 1Q98



Source: PaineWebber and company published data.

### Local service

At the end of the first quarter of 1998, the company had 220,587 ALEs in service, up from 81,349 at year-end 1997. Internally generated net access line additions of 27,627 for the first quarter were below the fourth quarter's 30,609 figure. Management explained the decrease in net adds as a result of difficulties with the company's provisioning and billing systems and problems related to the integration of the sales force.

Continued spending by the company and incumbents to improve their ability to provision lines should reaccelerate net add figures. In late 1997, Intermedia began to migrate its systems over to a new platform, which should positively affect second half results. In the second quarter, we expect the company to add 31,000 ALEs, a slight increase over the fourth quarter of 1997. We expect further acceleration in the latter half of the year as the new systems and the company's entry into new markets alleviate many of the constraints on its growth. We are projecting net adds of approximately 135,000 lines in 1998 and 196,000 lines in 1999 through internal growth.

As of the first quarter of 1998, approximately 29% of Intermedia's ALEs were on switch while 71% we considered off-net (this includes the ALEs acquired in the STF transaction). TSR lines as a percentage of the total should decline as the company adds a higher ratio of on-net lines each quarter and focuses on migrating the STF lines onto its own switch.

Management expects to have 80% of STF's trunk lines on its owned switches by year-end. As STF's 111,600 ALEs accounted for approximately half of the company's local business in the first quarter of 1998, this should have a material impact on gross margin. This migration alone will lower the percentage of off-net lines to 35-40% by year-end (assuming 60% on-net internal adds throughout 1998) and increase gross margins for local service by an estimated 10%.

Intermedia's agreements with Williams and MFN are likely to further improve gross margins by shifting the cost of network operations from the income statement to the balance sheet. Relying on incumbents only for last-mile connections in many of its markets, Intermedia will likely earn gross margins on local service of close to 60% in the outer years of our projection period.

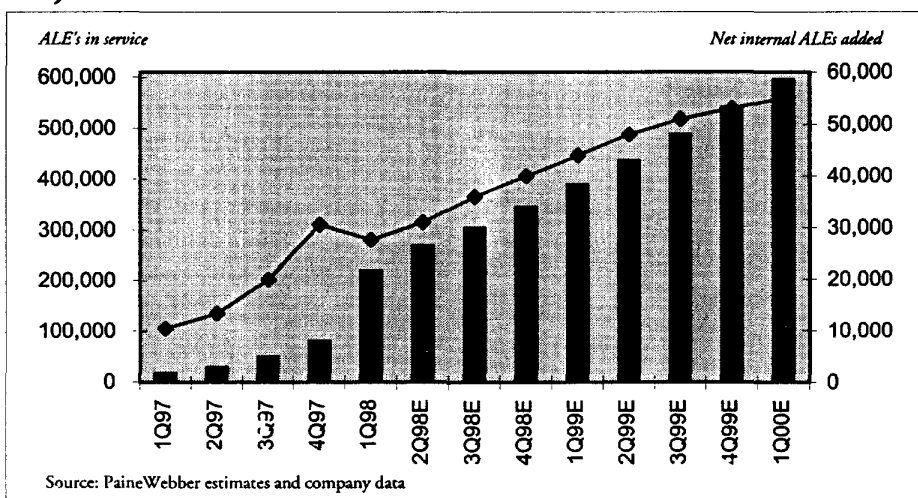
Table 1

## Projected access line growth

	1Q98E	2Q98E	3Q98E	4Q98E	1998E	1999E	2000E	2001E	2002E	2003E	2004E	2005E
Total access lines (bop)	81,349	220,587	269,587	305,587	81,349	345,587	541,587	781,587	1,061,587	1,381,587	1,701,587	2,021,587
Net adds - internal	27,627	31,000	36,000	40,000	134,627	196,000	240,000	280,000	320,000	320,000	320,000	320,000
Net adds - acquired	111,611	18,000	0	0	129,611	0	0	0	0	0	0	0
Total access lines (eop)	220,587	269,587	305,587	345,587	345,587	541,587	781,587	1,061,587	1,381,587	1,701,587	2,021,587	2,341,587
% growth	1169%	776%	502%	325%	325%	57%	44%	36%	30%	23%	19%	16%
Average access lines	150,968	245,087	287,587	325,587	213,468	443,587	661,587	921,587	1,221,587	1,541,587	1,861,587	2,181,587

Chart 1

## Projected internal net access line additions



## Data and Internet

Enhanced services should also continue to grow as the company adds new customers and better penetrates its existing customer base. STF represents an attractive opportunity, as its estimated 15,000 customers are not currently served with Intermedia's data offerings.

Figure 27

## Data nodes added

Enhanced Data Services:	1Q97	2Q97	3Q97	4Q97	1997	1Q98
Frame relay nodes (bop)	9,500	12,447	15,096	17,286	9,500	20,209
Net adds	2,947	2,649	2,190	2,923	10,709	2,580
Frame relay nodes (eop)	12,447	15,096	17,286	20,209	20,209	22,789
% change					112.7%	83.1%
Avg. frame nodes	10,974	13,772	16,191	18,748	14,855	21,499

Source: PaineWebber and company published data.

In enterprise data, the company is head and shoulders above its CLEC competitors and ranks with market leaders Sprint, MCI and AT&T. The company consistently adds between 2,500 and 3,000 frame relay nodes per quarter, each generating roughly \$300-350 per month in revenue. Revenue per node per month has been increasing as customer demand for higher-bandwidth, additional PVCs and add-on services such as ViewSpan (the company's network management service) continues to grow.

This has also had positive effects on frame relay service gross margin, which management has indicated is between 30% and 40% and is expected to increase to over 60% in the outer years of our projection period.

In January, Intermedia reached an agreement to carry all of US West's interLATA frame relay traffic. Management estimates that the deal could double the number of nodes added per quarter to 5,000-6,000, and contribute an additional \$3-4 million in monthly revenue. The company followed up in May with a similar deal with Ameritech, an important contract considering its potential merger with SBC Communications. Management believes this new contract could bring the company's net frame relay node adds to 6,000-12,000 per quarter by year-end 1998 and contribute \$60-100 million in incremental revenue in fiscal 1999.

The agreements with US West and Ameritech also allow Intermedia to market its voice services to frame relay accounts in markets outside of the originating RBOC's territory. For example, if Ameritech has a customer requiring a frame relay connection in New York, Intermedia is able to solicit this customer for voice services. Therefore, these agreements not only ensure continued growth of the company's data revenues, they are likely to jump-

start sales of voice services in new markets while defraying sales and marketing costs per net line added. This should give Intermedia added incentive to speed the introduction of switched service in new markets and provide it with a competitive advantage over other companies marketing to these customers.

DIGEX revenues also continue to grow rapidly although the company does not currently break out these figures. In the first quarter, DIGEX revenues grew 14% quarterly despite troubles in the company's private networks and web hosting areas.

#### *Long-distance*

Long-distance revenues continue to grow rapidly, driven by increased minutes of use (MOU). MOU increased a startling 26% quarter over quarter in the fourth quarter of 1997, compared with 9% in the third quarter and 16% in the second. The company is no longer promoting its low-margin international wholesale business. This product is being phased out over time, which will likely contribute to slower growth but increased gross margins for long-distance in the next few quarters.

The agreement with Williams for long-haul capacity is valued at \$450 million, representing the present value of the minimum payments Intermedia will make over the 20-year contract. While adding approximately \$417 million to PP&E, the agreement should improve EBITDA by shifting network expense to capitalized leases amortized over 20 years. The benefits will filter into the company's results over the next three to four quarters.

The company's high-quality long-distance platform and efforts it is taking to increase the percentage of high-margin retail traffic should have a positive effect on gross margins in the near term. Longer term, however, competition from alternative suppliers and new technology should have negative effects on this line of business.

Over the next seven years, we see gross margins rising to over 60%. The company benefits from the high gross margins in data and Internet service provision and continued progress in converting its access lines from TSR to switched resale.

While the RBOCs currently earn average EBITDA margins of 40-45%, the CLECs as a group are not expected to reach this level of profitability. Increased competition means declining prices and greater expenditures for sales, marketing and customer support. Intermedia's high percentage of data revenue should yield higher EBITDA margins than those for many of the other CLECs less focused

in this area. We estimate Intermedia will earn EBITDA margins of approximately 38% in the outer years of our projection period.

#### *Financial position*

Capital expenditures are expected to be \$400 million in 1998 and 1999, decreasing slowly thereafter. We do not expect the company to generate substantial free cash flow until 2001; therefore, the company will continue to be dependent on the capital markets to fund its expansion. Intermedia recently completed a \$450 million private offering, bringing its pro forma first quarter 1998 cash balance to approximately \$780 million. We project the company will not need additional financing until 2000, given management's current business plan.

#### *Valuation*

In Figure 30, we have included our discounted cash flow model. The 12-month target price of \$50 per share assumes a 14% cost of capital, which we believe compensates equity holders for the risks inherent in the company's financial and operational leverage.

At its current market capitalization of \$4.4 billion, Intermedia trades at a discount to the group based on most traditional market multiples yet scores higher than average on many performance measures. At 3.9x gross PP&E, Intermedia trades at a discount to the group despite the strategic importance of the company's asset base. Its multiples of 5.9x and 4.2x estimated revenues for 1998 and 1999 are also a slight discount to the group's 6.8x and 4.4x figures. The company's multiple of 13x estimated 2000 EBITDA will become important in two to three quarters when the market begins to focus on 2000 numbers. Meanwhile, revenue per dollar of PP&E and revenue per employee are among the highest in the group.

#### *Conclusion*

The changing needs of small and medium-sized businesses and the incumbents' inability to address these needs will continue to drive demand for Intermedia's services. The company's frame relay business is strong and we expect revenue growth from this business line to accelerate as the Ameritech and US West contracts start to take hold. The opportunity is tremendous and we are confident that Intermedia has a superior collection of assets and the strong management team required to fully capitalize on it.

We believe Intermedia has been penalized in the past by a perceived lack of breadth in its switched voice service offering while the value of its data service business has



been overlooked. Investors simply have not recognized the importance of the company's data service offering, nor have they understood the powerful economics behind it. Because of this, Intermedia has historically traded at a discount to the group in terms of revenue and PP&E multiples.

As the company moves from 17 on-switch markets to 35 over the next 18-24 months, the proportion of on-switch access lines will increase from 60% to over 80% in 1999 (assuming continued 85% on-net to 15% TSR net adds and our estimate for new lines). The agreement with MFN should also decrease the company's reliance on incumbents' networks, increasing margins and ensuring reliability. The continued clamor of incumbents concerning their need to offer interLATA data services will further educate investors about the compelling nature of Intermedia's assets and highlight the attractiveness of the company's valuation.

Over the next five years, we expect the leading telecom players to emerge as integrated communications providers competing on a national scale for "all-distance" voice and data traffic. WorldCom is positioning itself to play a large role in this environment. The RBOCs, GTE and the other large IXCs must undergo rapid changes to assemble the assets needed to compete. Rapid technological and regulatory change, combined with mounting competitive pressure, will force these players to act quickly, increasing the likelihood of buying strategic assets rather than building them over the course of a decade. Within this framework, Intermedia is an important piece of the puzzle, and in the "under \$10 billion" class, a one-of-a-kind asset.

Figure 28

**Intermedia statement of operations**

(US\$ in millions)	1998E	1999E	2000E	2001E	2002E	2003E	2004E	2005E
Local	\$157.1	\$309.6	\$455.3	\$623.7	\$812.0	\$1,026.1	\$1,240.2	\$1,454.3
Enhanced data	170.3	222.0	301.4	381.4	466.5	558.0	657.3	766.1
Interexchange	327.0	401.3	439.6	483.5	532.8	584.7	642.9	708.2
Integration	91.3	98.6	118.8	128.3	134.7	141.4	148.5	156.8
<b>Total Revenue</b>	<b>\$745.7</b>	<b>\$1,031.5</b>	<b>\$1,315.1</b>	<b>\$1,616.9</b>	<b>\$1,946.0</b>	<b>\$2,310.2</b>	<b>\$2,688.8</b>	<b>\$3,085.4</b>
% growth	200.8%	38.3%	27.5%	23.0%	20.4%	18.7%	16.4%	14.8%
<b>Cost of Sales</b>	<b>454.8</b>	<b>554.9</b>	<b>643.2</b>	<b>722.7</b>	<b>793.5</b>	<b>902.5</b>	<b>1,034.2</b>	<b>1,181.1</b>
% sales	61.0%	53.8%	48.9%	44.7%	40.8%	39.1%	38.5%	38.3%
<b>GM</b>	<b>\$290.8</b>	<b>\$476.7</b>	<b>\$671.9</b>	<b>\$894.2</b>	<b>\$1,152.4</b>	<b>\$1,407.6</b>	<b>\$1,654.6</b>	<b>\$1,904.4</b>
% sales	39.0%	46.2%	51.1%	55.3%	59.2%	60.9%	61.5%	61.7%
<b>SG&amp;A</b>	<b>233.7</b>	<b>288.8</b>	<b>341.9</b>	<b>404.2</b>	<b>467.0</b>	<b>531.3</b>	<b>618.4</b>	<b>709.6</b>
% sales	31.3%	28.0%	26.0%	25.0%	24.0%	23.0%	23.0%	23.0%
<b>EBITDA</b>	<b>\$57.2</b>	<b>\$187.8</b>	<b>\$330.0</b>	<b>\$489.9</b>	<b>\$685.4</b>	<b>\$876.3</b>	<b>\$1,036.1</b>	<b>\$1,194.7</b>
% sales	7.7%	18.2%	25.1%	30.3%	35.2%	37.9%	38.5%	38.7%
% growth		228.4%	75.7%	48.5%	39.9%	27.9%	18.2%	15.3%
<b>D&amp;A</b>	<b>186.0</b>	<b>228.1</b>	<b>270.2</b>	<b>307.0</b>	<b>343.9</b>	<b>380.7</b>	<b>417.6</b>	<b>454.4</b>
<b>EBIT</b>	<b>(\$128.8)</b>	<b>(\$40.3)</b>	<b>\$59.8</b>	<b>\$182.9</b>	<b>\$341.5</b>	<b>\$495.6</b>	<b>\$618.6</b>	<b>\$740.3</b>
% sales	-17.3%	-3.9%	4.5%	11.3%	17.5%	21.5%	23.0%	24.0%
<b>Interest, net</b>	<b>(184.4)</b>	<b>(167.8)</b>	<b>(214.4)</b>	<b>(221.6)</b>	<b>(230.8)</b>	<b>(214.0)</b>	<b>(176.3)</b>	<b>(138.7)</b>
<b>Other</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Pre-tax income</b>	<b>(\$313.1)</b>	<b>(\$208.1)</b>	<b>(\$154.6)</b>	<b>(\$38.7)</b>	<b>\$110.7</b>	<b>\$281.6</b>	<b>\$442.3</b>	<b>\$601.6</b>
<b>Preferred stock</b>	<b>(75.6)</b>	<b>(78.8)</b>	<b>(86.4)</b>	<b>(94.9)</b>	<b>(104.7)</b>	<b>(115.9)</b>	<b>(128.7)</b>	<b>(143.2)</b>
<b>Net income</b>	<b>(\$388.8)</b>	<b>(\$286.9)</b>	<b>(\$241.0)</b>	<b>(\$133.6)</b>	<b>\$6.0</b>	<b>\$165.7</b>	<b>\$313.6</b>	<b>\$458.3</b>
% sales	-52.1%	-27.8%	-18.3%	-8.3%	0.3%	7.2%	11.7%	14.9%
<b>EPS before x-items</b>	<b>(\$10.08)</b>	<b>(\$7.14)</b>	<b>(\$5.88)</b>	<b>(\$3.20)</b>	<b>\$0.14</b>	<b>\$3.82</b>	<b>\$7.10</b>	<b>\$10.19</b>
<b>Extraordinary items</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Income (Loss) per share</b>	<b>(\$12.49)</b>	<b>(\$7.14)</b>	<b>(\$5.88)</b>	<b>(\$3.20)</b>	<b>\$0.14</b>	<b>\$3.82</b>	<b>\$7.10</b>	<b>\$10.19</b>
<b>Weighted avg. shares o/s</b>	<b>37.8</b>	<b>40.2</b>	<b>41.0</b>	<b>41.8</b>	<b>42.6</b>	<b>43.4</b>	<b>44.2</b>	<b>45.0</b>
<b>EBIT*(1-t)</b>	<b>(\$128.8)</b>	<b>(\$40.3)</b>	<b>\$59.8</b>	<b>\$182.9</b>	<b>\$341.5</b>	<b>\$495.6</b>	<b>\$618.6</b>	<b>\$740.3</b>
<b>Plus: D&amp;A</b>	<b>186.0</b>	<b>228.1</b>	<b>270.2</b>	<b>307.0</b>	<b>343.9</b>	<b>380.7</b>	<b>417.6</b>	<b>454.4</b>
<b>Less: capex</b>	<b>376.9</b>	<b>400.0</b>	<b>400.0</b>	<b>350.0</b>	<b>350.0</b>	<b>350.0</b>	<b>350.0</b>	<b>350.0</b>
<b>Less: changes in working cap.</b>	<b>23.8</b>	<b>(8.6)</b>	<b>(8.5)</b>	<b>(9.1)</b>	<b>(9.9)</b>	<b>(10.9)</b>	<b>(11.4)</b>	<b>(11.9)</b>
<b>= Free Cash Flow</b>	<b>(\$295.9)</b>	<b>(\$220.8)</b>	<b>(\$78.5)</b>	<b>\$130.9</b>	<b>\$325.5</b>	<b>\$515.4</b>	<b>\$674.8</b>	<b>\$832.8</b>

Source: PaineWebber and company published data.

Figure 29

## Intermedia sources and uses of cash

(US\$ in millions)	1998E	1999E	2000E	2001E	2002E	2003E	2004E	2005E
<b>USES OF FUNDS</b>								
Acquisitions	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Capital expenditures	376.9	400.0	400.0	350.0	350.0	350.0	350.0	350.0
Changes in working capital	(23.8)	8.6	8.5	9.1	9.9	10.9	11.4	11.9
Operating deficit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Interest	113.8	139.9	162.4	189.9	234.1	258.7	222.7	186.7
Preferred dividends	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
Taxes and other	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Uses	\$893.2	\$574.4	\$596.9	\$574.9	\$619.9	\$645.6	\$610.0	\$574.5
<b>SOURCES OF FUNDS</b>								
Debt	\$0.0	\$0.0	\$250.0	\$0.0	\$0.0	(\$200.0)	(\$400.0)	(\$400.0)
Equity	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Operating surplus	67.0	187.8	330.0	489.9	685.4	876.3	1,036.1	1,194.7
Cash interest	29.0	22.9	4.8	4.2	0.1	3.4	5.1	6.7
Total Sources	\$100.0	\$210.8	\$584.7	\$494.1	\$685.5	\$679.7	\$641.2	\$801.4
Cash (bop)	756.9	459.0	95.3	83.2	2.3	67.9	102.1	133.3
Change in Cash	(298.0)	(363.7)	(12.1)	(80.8)	65.6	34.1	31.2	226.8
Cash (eop)	\$459.0	\$95.3	\$83.2	\$2.3	\$67.9	\$102.1	\$133.3	\$360.1
Debt (eop)	\$1,775.8	\$1,775.8	\$2,025.8	\$2,025.8	\$2,025.8	\$1,825.8	\$1,425.8	\$1,025.8

Source: PaineWebber estimates.

Figure 30

## Intermedia discounted cash flow analysis

(US\$ in millions)	1998E	1999E	2000E	2001E	2002E	2003E	2004E	2005E
EBITDA	\$57.2	\$187.8	\$330.0	\$489.8	\$685.9	\$876.3	\$1,035.6	\$1,193.6
FCF	(295.9)	(220.8)	(78.5)	130.8	326.0	515.4	674.2	831.7
Discount Value		14%						
PV of FCF, 1999-2004		\$643						
Terminal Value							\$10,742	
PV of Terminal Value		5,225						
Corporate Value		\$5,868						
Less: Debt, net		(1,681)						
Equity Value		\$4,188						
Public Market Discount		20%						
Market Value of Equity		\$3,350						
Share o/s (f.d.)		67.6						
Target share price		\$50						
				Current Price		\$41.2		
				Target Price		\$50		
				Expected Return		20.3%		

Source: PaineWebber estimates.

Figure 31

## Intermedia valuation sensitivity analysis

		Target stock price - 20% public market discount				
2005 Exit multiple		8.0x	8.5x	9.0x	9.5x	10.0x
Discount	13.0%	\$38	\$49	\$53	\$57	\$60
rate	13.5%	\$36	\$48	\$51	\$55	\$58
	14.0%	\$35	\$46	\$50	\$53	\$56
	14.5%	\$34	\$45	\$48	\$51	\$55
	15.0%	\$33	\$43	\$46	\$50	\$53

Source: PaineWebber estimates.

Figure 32

**Intermedia balance sheet**

(US\$ in millions)	1998E	1999E	2000E	2001E	2002E	2003E	2004E	2005E
Cash and equiv.	\$459.0	\$95.3	\$83.1	\$2.2	\$68.2	\$102.4	\$133.1	\$358.9
Accounts rec.	149.1	206.3	263.0	323.3	389.4	462.0	537.5	616.6
Prepaid exp. & other	22.4	30.9	39.4	48.5	58.4	69.3	80.6	92.5
<b>Total Current Assets</b>	<b>\$630.5</b>	<b>\$332.5</b>	<b>\$385.6</b>	<b>\$374.0</b>	<b>\$516.0</b>	<b>\$633.7</b>	<b>\$751.3</b>	<b>\$1,068.0</b>
PP&E, net	1,213.2	1,444.3	1,633.3	1,735.5	1,800.9	1,829.4	1,821.1	1,775.9
Intangibles, net	1,115.1	1,055.8	996.6	937.4	878.1	818.9	759.6	700.4
Other assets	14.9	20.6	26.3	32.3	38.9	46.2	53.8	61.7
<b>Total Assets</b>	<b>\$2,973.6</b>	<b>\$2,853.3</b>	<b>\$3,041.8</b>	<b>\$3,079.2</b>	<b>\$3,234.0</b>	<b>\$3,328.2</b>	<b>\$3,385.8</b>	<b>\$3,606.0</b>
Accounts payable	89.5	123.8	157.8	194.0	233.6	277.2	322.5	370.0
Other accrued expenses	52.2	61.9	65.7	72.7	77.9	80.9	86.0	86.3
Other current liabilities	-	-	-	-	-	-	-	-
<b>Total Current Liabilities</b>	<b>\$224.2</b>	<b>\$274.1</b>	<b>\$324.9</b>	<b>\$384.7</b>	<b>\$447.7</b>	<b>\$512.2</b>	<b>\$579.4</b>	<b>\$645.0</b>
LTD	1,847.8	1,930.6	2,273.4	2,350.9	2,389.0	2,189.0	1,789.0	1,389.0
Capitalized leases and other	440.3	440.3	440.3	440.3	440.3	440.3	440.3	440.3
<b>Total Liabilities</b>	<b>\$2,512.3</b>	<b>\$2,645.0</b>	<b>\$3,038.7</b>	<b>\$3,175.9</b>	<b>\$3,277.0</b>	<b>\$3,141.5</b>	<b>\$2,808.7</b>	<b>\$2,474.3</b>
Preferred stock	744.9	796.3	856.7	925.6	1,004.4	1,094.3	1,197.0	1,314.2
Shareholder equity	(\$283.6)	(\$588.1)	(\$853.6)	(\$1,022.4)	(\$1,047.3)	(\$907.5)	(\$619.9)	(\$182.5)
<b>Total Liabilities &amp; SE</b>	<b>\$2,973.6</b>	<b>\$2,853.3</b>	<b>\$3,041.8</b>	<b>\$3,079.2</b>	<b>\$3,234.0</b>	<b>\$3,328.2</b>	<b>\$3,385.8</b>	<b>\$3,606.0</b>

Source: PaineWebber estimates.

Figure 33

**Intermedia quarterly income statement**

(US\$ in millions)	1Q97	2Q97	3Q97	4Q97	1997	1Q98	2Q98E	3Q98E	4Q98E	1998E	1999E
Local	\$5.2	\$8.4	\$11.8	\$16.5	\$42.0	\$33.7	\$37.2	\$41.1	\$45.1	\$157.1	\$309.6
Enhanced data	11.3	12.7	30.8	31.8	86.6	36.5	40.3	44.5	49.0	170.3	222.0
Interexchange	25.5	27.7	27.6	32.3	113.2	44.8	85.6	94.3	102.4	327.0	401.3
Integration	1.9	1.3	1.0	2.0	6.1	21.8	22.7	23.1	23.6	91.3	98.6
<b>Total Revenue</b>	<b>\$43.9</b>	<b>\$50.1</b>	<b>\$71.2</b>	<b>\$82.6</b>	<b>\$247.9</b>	<b>\$136.8</b>	<b>\$185.7</b>	<b>\$203.0</b>	<b>\$220.2</b>	<b>\$745.7</b>	<b>\$1,031.5</b>
<b>% growth</b>	<b>325.4%</b>	<b>297.5%</b>	<b>209.7%</b>	<b>211.4%</b>	<b>139.8%</b>	<b>211.3%</b>	<b>270.5%</b>	<b>184.9%</b>	<b>166.6%</b>	<b>200.8%</b>	<b>38.3%</b>
Cost of Sales	36.9	43.8	59.5	58.9	199.1	100.3	121.1	114.1	119.3	454.8	554.9
<b>% sales</b>	<b>84%</b>	<b>87%</b>	<b>84%</b>	<b>71%</b>	<b>80.3%</b>	<b>73.3%</b>	<b>65.2%</b>	<b>56.2%</b>	<b>54.2%</b>	<b>61.0%</b>	<b>53.8%</b>
GM	\$7.0	\$6.3	\$11.7	\$23.7	\$48.8	\$36.5	\$64.6	\$88.9	\$100.8	\$290.8	\$476.7
<b>% sales</b>	<b>16.0%</b>	<b>12.6%</b>	<b>16.5%</b>	<b>28.7%</b>	<b>19.7%</b>	<b>26.7%</b>	<b>34.8%</b>	<b>43.8%</b>	<b>45.8%</b>	<b>39.0%</b>	<b>46.2%</b>
SG&A	19.5	20.5	25.0	33.6	98.6	46.3	59.4	62.9	64.9	233.7	288.8
<b>% sales</b>	<b>44.4%</b>	<b>40.8%</b>	<b>35.1%</b>	<b>40.7%</b>	<b>39.8%</b>	<b>33.9%</b>	<b>32.0%</b>	<b>31.0%</b>	<b>29.5%</b>	<b>31.3%</b>	<b>28.0%</b>
EBITDA	(\$12.5)	(\$14.1)	(\$13.3)	(\$9.9)	(\$49.8)	(\$9.8)	\$5.2	\$26.0	\$35.9	\$57.2	\$187.8
<b>% sales</b>	<b>-28.4%</b>	<b>-28.2%</b>	<b>-18.6%</b>	<b>-12.0%</b>	<b>-20.1%</b>	<b>-7.2%</b>	<b>2.8%</b>	<b>12.8%</b>	<b>16.3%</b>	<b>7.7%</b>	<b>18.2%</b>
<b>% growth</b>											<b>228.4%</b>
D&A	8.3	9.9	16.1	18.3	52.6	39.9	44.7	49.4	52.0	186.0	228.1
EBIT	(\$20.8)	(\$24.0)	(\$29.4)	(\$28.2)	(\$102.4)	(\$49.7)	(\$39.6)	(\$23.4)	(\$16.1)	(\$128.8)	(\$40.3)
<b>% sales</b>	<b>-47.3%</b>	<b>-47.9%</b>	<b>-41.2%</b>	<b>-34.2%</b>	<b>-41.3%</b>	<b>-36.3%</b>	<b>-21.3%</b>	<b>-11.5%</b>	<b>-7.3%</b>	<b>-17.3%</b>	<b>-3.9%</b>
Interest, net	(6.6)	(5.6)	(11.0)	(20.8)	(44.0)	(49.3)	(42.4)	(45.4)	(47.3)	(184.4)	(167.8)
Other	0.0	0.0	0.0	10.1	10.1	10.7	0.0	0.0	0.0	0.0	0.0
<b>Pre-tax income</b>	<b>(\$27.4)</b>	<b>(\$29.6)</b>	<b>(\$40.3)</b>	<b>(\$38.9)</b>	<b>(\$136.2)</b>	<b>(\$88.3)</b>	<b>(\$82.0)</b>	<b>(\$68.8)</b>	<b>(\$63.4)</b>	<b>(\$313.1)</b>	<b>(\$208.1)</b>
Tax expense	-	-	-	-	-	-	-	-	-	-	-
Extraordinary item	0.0	0.0	(103.8)	0.0	(103.8)	(85.0)	0.0	0.0	0.0	0.0	0.0
Preferred stock	(3.4)	(9.8)	(13.9)	(16.6)	(43.7)	(18.6)	(18.6)	(19.0)	(19.5)	(75.6)	(78.8)
<b>Net income</b>	<b>(\$30.8)</b>	<b>(\$39.5)</b>	<b>(\$158.1)</b>	<b>(\$55.5)</b>	<b>(\$283.8)</b>	<b>(\$191.9)</b>	<b>(\$100.6)</b>	<b>(\$87.8)</b>	<b>(\$82.9)</b>	<b>(\$388.8)</b>	<b>(\$286.9)</b>
<b>% sales</b>	<b>-70.0%</b>	<b>-78.8%</b>	<b>-221.8%</b>	<b>-67.2%</b>	<b>-114.5%</b>	<b>-140.3%</b>	<b>-54.1%</b>	<b>-43.2%</b>	<b>-37.6%</b>	<b>-52.1%</b>	<b>-27.8%</b>
EPS before x-items	(\$0.94)	(\$1.19)	(\$1.62)	(\$1.61)	(\$5.36)	(\$3.03)	(\$2.70)	(\$2.26)	(\$2.09)	(\$10.08)	(\$7.14)
Extraordinary items	0.00	0.00	(3.10)	0.00	(3.10)	(2.41)	0.00	0.00	0.00	0.00	0.00
<b>Income (Loss) per share</b>	<b>(\$0.94)</b>	<b>(\$1.19)</b>	<b>(\$4.72)</b>	<b>(\$1.61)</b>	<b>(\$8.47)</b>	<b>(\$5.43)</b>	<b>(\$2.70)</b>	<b>(\$2.26)</b>	<b>(\$2.09)</b>	<b>(\$12.49)</b>	<b>(\$7.14)</b>
<b>Weighted avg. shares o/s</b>	<b>32.6</b>	<b>33.1</b>	<b>33.5</b>	<b>34.6</b>	<b>33.3</b>	<b>35.3</b>	<b>37.3</b>	<b>38.8</b>	<b>39.6</b>	<b>37.8</b>	<b>40.2</b>

Source: PaineWebber estimates.

## e.spire Communications

**Rating: Attractive**

**Price target: \$24**

### Highlights

- e.spire is the fastest-growing CLEC with over \$500 million in market capitalization. The company has installed 15 Lucent 5ESS voice switches in the past year and a half. Eight more are planned for 1998, bringing the company's total to 25. New markets include Atlanta, south Florida, Dallas, Washington, D.C., and San Antonio, highlighting the new focus on Tier I and large Tier II cities. With these new markets, management estimates it faces a \$15 billion addressable business market.
- The company has undergone a transformation. A new name and management team combined with needed financing and a strategy based on providing a bundled package of voice, data and Internet service, position e.spire to take full advantage of new opportunities.
- The company's revenue growth is the strongest of its peer group, with a first quarter 1998 year-over-year increase of 236%. High-margin products such as data and Internet, local, and special access account for 95% of total revenues. While over 70% of the company's access lines are resold, most should be converted to on-switch by year-end. Long-distance, the product we find least attractive, represents only a tiny portion of the mix.
- e.spire's established presence in the southern half of the United States makes the company attractive to carriers looking to compete with BellSouth. As the company expands nationally into larger markets, its value to major carriers needing local assets will increase.

7/16 price \$21 9/32 OTC—ESPI 52-week range \$6 7/8 - \$23 3/8

FY	1997	1998E	1999E
Q1	\$(3.19)	\$(1.08)	—
Q2	(0.92)	(0.85)	—
Q3	(0.90)	(0.84)	—
Q4	(1.18)	(0.76)	—
Year	\$(4.65)	\$(3.53)	\$(3.30)
P/E	—	—	—
Div	—	—	—
Yield	—	—	—
Secular Growth Rate	40%		

**Company description:** e.spire Communications is a competitive access provider operating in markets throughout the southern United States. The company offers dedicated access, switched local, data and Internet services to interexchange carriers, businesses and government end users.

### Overview

e.spire operates 32 fiber-based local networks in markets throughout the southern United States. As a competitive access provider, the vast majority of its revenues were derived from providing high-capacity circuits to long-distance companies and large business customers. In January 1997, the company began offering switched local service and, as of the first quarter, had installed 17 voice switches and over 57,000 switched access lines<sup>2</sup> throughout its service areas.

Figure 34

#### Current switched markets

Albuquerque	Kansas City, MO
Austin	Little Rock
Balt/Wash. Corridor	Louisville
Birmingham	Montgomery
Colorado Springs	New Orleans
Columbus, GA	Tampa
Fort Worth	Tucson
Greenville, SC	Tulsa
Jacksonville	

Source: Company published data.

Jack Reich (Ameritech, MCI) was brought in as president and CEO to reorient the company from a construction-driven CAP to a customer-focused, full-service CLEC. New hires Ron Spears (MCI, Citizens, AT&T) as COO, Vernon Irvin (MFS, Ameritech, MCI) as SVP of marketing and strategy, and Richard Putt (MCI) as EVP of sales and customer support have added the depth and experience required of a senior management team.

e.spire has many of the elements we look for in a CLEC investment: rapid growth in revenues and on-net access lines, high-quality revenue mix, end-to-end networks and strong management. The company also seems to be ahead of the curve in deploying the systems to successfully manage rapid growth.

The cash crunch the company experienced in the second quarter of 1997 was relieved through two preferred issues and a high-yield offering that raised net proceeds of \$420 million. A March 1998 secondary offering of 8.1 million shares brought the company's pro forma cash balance to

<sup>2</sup> Trunk lines are counted as one access line each consistent with RBOC methodology.

almost \$400 million at year-end 1997. With these new resources and increased flexibility from its bondholders, the company seeks to expand rapidly, moving upmarket to serve larger customers while developing national scope.

#### Investment case

*Our DCF valuation, using a 14% discount rate, a terminal value of 9x estimated 2005 EBITDA, and 20% public market discount, gives us a 12-month price target of \$24 per share, a 13% premium to its recent price of \$21 9/32 per share. We project the company will show positive EBITDA in the second quarter of 1999 and earnings per share in 2002.*

*The company trades at a premium to the group, with an EV/revenue multiple of 6.1x for 1999 and 3.8x for 2000 based on its industry-leading growth. The company's plans call for continued expansion into new markets to establish e.spire as one of the few alternative carriers with a national presence.*

*The company's revenue mix positions e.spire to exploit the industry's most favorable economics. In the first quarter, data accounted for 34% of total revenues and grew at a sequential rate of over 16%. Local service accounted for 30% and grew at a 50% sequential rate. The deployment of fixed assets to increase the percentage of on-net traffic will drive gross margins and returns on capital as these businesses gain scale. This compares favorably with other CLECs' reliance on low-margin long-distance and non-telecom business lines for a substantial portion of revenue.*

#### Strategic assessment

**Growth**—After only five quarters of switched local service, e.spire has installed 17 Lucent 5ESS voice switches and over 57,000 access lines, producing quarterly revenue of \$9.3 million. The company now has fiber infrastructure in 32 markets throughout the southern half of the United States.

Figure 35

#### e.spire fiber networks

Albuquerque	Colorado Springs	Irving	Mobile
Amarilla	Columbia, SC	Jackson	Montgomery
Austin	Columbus, GA	Jacksonville	New Orleans
Balt/Wash. Corr.	Corpus Christi	Kansas City, MO	Shreveport
Baton Rouge	Dallas	Las Vegas	Spartanburg
Birmingham	El Paso	Lexington	Tampa
Charleston	Fort Worth	Little Rock	Tucson
Chatanooga	Greenville	Louisville	Tulsa

Source: e.spire.

Armed with less restrictive covenants from its bondholders, e.spire plans to continue its rapid expansion of switched service into new markets. The company's recent announcement that it will acquire switches in Dallas and Washington, D.C., and begin switched services in San Antonio, typifies this push to gain scale in large markets.

New efforts are also under way to move the company up market. The company's average customer has nine access lines. This is up from approximately seven lines per customer a year ago. In leveraging the company's bundled service offering, the nationwide data capabilities gained through InterconX and a targeted sales force, e.spire management hopes to benefit from the higher revenue and improved margins of service to larger customers.

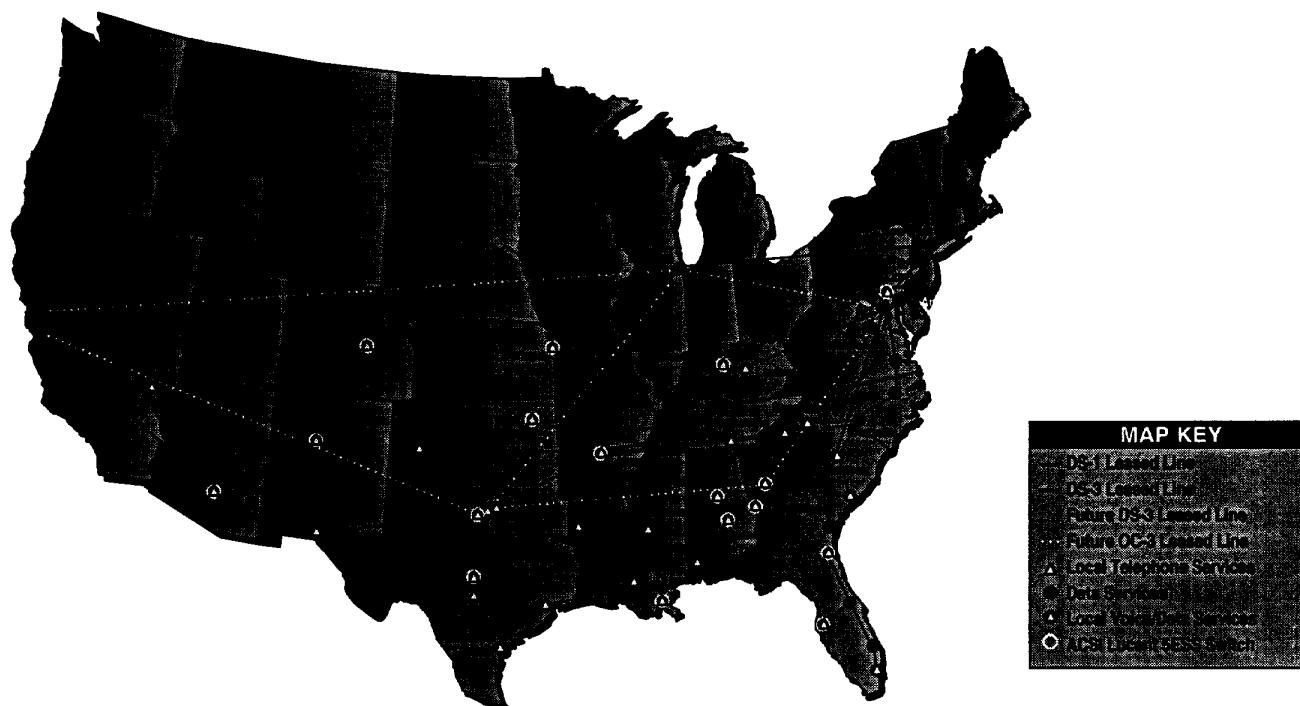
We also expect the company to become more aggressive in its efforts to grow through acquisitions, having gained additional flexibility from creditors. Aside from the purchase of Cybergate, the company has been relatively quiet in this arena due to restrictive covenants that prevented it from including a significant amount of cash in an offer.

**Bundled service offering**—Beginning with the company's third quarter 1997 introduction of "ValuPaks," e.spire has promoted a bundled package of services. ValuPaks include managed Internet functions such as domain name registration, web site hosting, news feeds and a preconfigured router plus frame relay service tailored to the needs of each customer.

In the second quarter, e.spire introduced its Platinum product, bundling local and long-distance voice, Internet and enterprise data products on a single circuit with a single bill. Platinum has been rolled out in each of the company's switched markets and management suggests its acceptance is beating internal estimates. Similar to Intermedia's "Single T" solution, we believe e.spire's Platinum is a product that will appeal to the midsized business market that has been neglected by incumbents for so long.

**Heavy focus on sales and customer support functions**—e.spire has put considerable effort into revamping its sales and marketing department. Under the leadership of Richard Putt, the department has been restructured so that the sales managers in each market report to seven regional sales directors who report to two vice presidents. This structure encourages competition all the way up the ladder while ensuring the consistency required of an organization with national aspirations.

## e.spire network map



The company is in the process of installing an integrated OSS system to manage growth and take full advantage of new opportunities. By year-end, all products are expected to be billed on a single platform. The current, Lotus Notes-based order entry and provisioning system will be replaced in the coming months so that the company can

e.spire also has a small but growing data network, with 47 Newbridge ATM/frame relay switches installed and 592 ports in service at the end of the first quarter of 1998. In March, the company entered into an agreement with IXC Communications and fONOROLA to create InterconX, a data networking consortium with 21,000 network miles spanning the U.S. and Canada. InterconX will leverage the long-haul facilities of IXC and fONOROLA and the local infrastructure of e.spire to sell seamless, nationwide

data products that appeal to customers with numerous sites across the country.

### Management assessment

There has been considerable management turnover at e.spire in the last year. While we would prefer to see stability in the top ranks of a company, we do not believe these changes are the result of major problems at e.spire. Furthermore, we believe the current management team has the experience and drive necessary to take the company to the next level.

Chairman of the Board Tony Pompliano is a founder of the company and currently owns approximately 3.3% of e.spire shares. Mr. Pompliano has over 35 years experience in telecommunications, having founded Metropolitan Fiber Systems of Chicago (the predecessor of MFS Communications) and served as its CEO until 1991. He has also held high-level positions with MCI and Western Union International.

Jack Reich joined the company from Ameritech where he was president of custom business services and oversaw data, electronic commerce and outsourcing initiatives for the company. Prior to joining Ameritech, Mr. Reich held a number of senior positions at MCI, including president of the multinational accounts division. Mr. Reich also has extensive experience with Rolm Corporation and AT&T, where he began his telecommunications career in 1975. He holds an MBA from the University of Chicago.

Ronald Spears, chief operating officer, joined the company in the first quarter. Mr. Spears has more than 20 years of operating experience, most recently at Citizens Utilities where he was responsible for the company's telco operations in 13 states and its CLEC operations in five markets. He worked at MCI for 11 years, and served as president of its Midwest division from 1984 to 1990. Mr. Spears began his career at AT&T after serving in the Army for eight years. He is a graduate of the U.S. Military Academy at West Point.

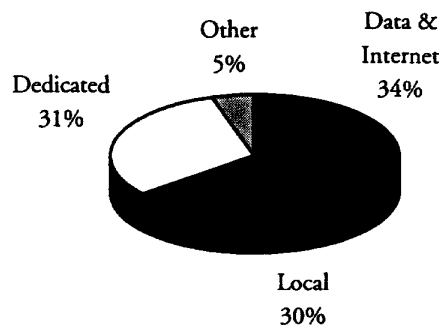
Richard Putt took over the sales and marketing effort in January 1998 and has had a major impact in less than six months. His 24 years of experience in sales at MCI should bring the expertise needed to build an industry leading sales effort.

### Financial assessment

In the first quarter of 1998, 34% of e.spire's revenue was generated by data and Internet services, 31% came from dedicated service, and another 30% was generated by switched services. These are the three businesses offering the best economics and e.spire is well positioned to leverage its capabilities in each area.

Figure 37

#### e.spire's revenue mix, 1Q98



Source: PaineWebber and company published data.

### Local service

The company's local service business grew from zero to over 57,000 access lines in service in under 15 months. Management has shown its ability to consistently increase the number of net adds each quarter. In the first quarter, e.spire added over 22,500 lines, almost doubling its number of adds six months earlier and growing its installed base by over 39%.

Like many CLECs, e.spire resells local service in markets it expects to enter with switched service in the near future. The majority of the company's access lines, approximately 40,000, are TSR. Most of these are expected to be converted to "on-switch" by year-end.

This should have positive effects on local service gross margins. The existence of owned fiber in the vast majority of the company's switched markets should increase the percentage of on-net traffic, pushing margins to 40-50% in these cities.



Table 2

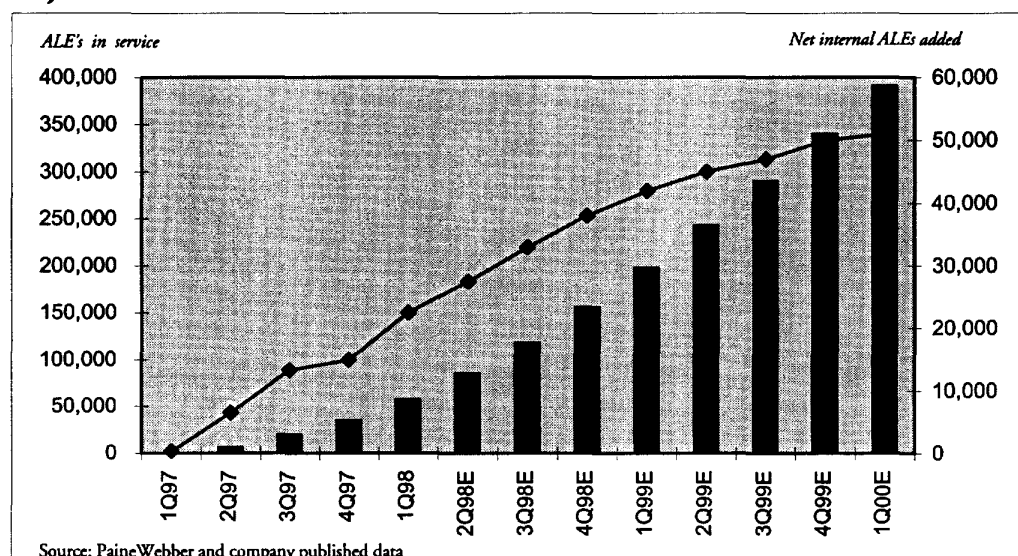
## Projected access line growth

	1Q98	2Q98E	3Q98E	4Q98E	1998E	1999E	2000E	2001E	2002E	2003E	2004E	2005E
Total access Lines (bop)	35,105	57,633	85,133	118,133	35,105	156,133	340,133	540,133	750,133	960,133	1,170,133	1,380,133
Net adds	22,528	27,500	33,000	38,000	121,028	184,000	200,000	210,000	210,000	210,000	210,000	210,000
Total access Lines (eop)	57,633	85,133	118,133	156,133	156,133	340,133	540,133	750,133	960,133	1,170,133	1,380,133	1,590,133
% growth		1149%	487%	345%	345%	118%	59%	39%	28%	22%	18%	15%
Average access lines	46,369	71,383	101,633	137,133	95,619	248,133	440,133	645,133	855,133	1,065,133	1,275,133	1,485,133

Source: PaineWebber estimates

Chart 2

## Projected internal net access line additions



Source: PaineWebber and company published data

Local service margins should get another small boost over the next two to three quarters as e.spire converts the operating leases on its Lucent switches to capitalized leases. The equipment was originally financed in this manner because of the liquidity constraints the company faced in early 1997. The operating leases accounted for approximately \$1.5 million per quarter, or approximately 5.5% of total sales.

### Data and Internet

The company's data and Internet revenues grew at a quarterly rate of 16% in the first quarter of 1998, putting the company in the ranks of the top-tier providers in the business. Approximately 50% of these revenues are generated by Cybergate, the company's Florida-based ISP, acquired in early 1997. Cybergate provides web-hosting and dial-up Internet connections for small business customers.

The other 50% consists of dedicated Internet access and frame relay service. e.spire's frame relay network is still very small, consisting of 592 ports, all added since service was initiated in late 1996. In the first quarter of 1998,

293 frame relay ports were added, compared with 68 in the fourth quarter of 1997 and 92 in the third quarter of 1997. Sales of e.spire Platinum should further accelerate the growth of its enterprise data services. The company's agreement with FONOROLA and IXC Communications gives it access to a nationwide ATM network to deliver high-speed data services as demand for these products grows.

Figures 38

### Data ports

	1Q97	2Q97	3Q97	4Q97	1Q98
Frame ports (bop)	27	46	139	231	299
Ports added	19	93	92	68	293
Frame ports (eop)	46	139	231	299	592
% change		202.2%	66.2%	29.4%	98.0%

Source: e.spire

### Dedicated

The company's dedicated access service is a lucrative business that continues to show moderate growth. Gross margins of approximately 60% are earned from major customers that include AT&T, MCI and other second-

and third-tier IXC and ISPs. Approximately 75% of sales in this category are to wholesale customers, but management expects to end the year with dedicated revenues evenly split with retail.

We expect e.spire to continue its rapid top-line growth and have projected a five-year CAGR of 72%. We are projecting the company will post positive EBITDA in the second quarter of 1999, free cash flow in 2002 and earnings per share in 2003. Based on the projected growth in each of e.spire's business lines and the expected margins earned on each, we estimate the company's gross margins will expand from approximately 34% in 1998 to 58% in 2005.

### *Liquidity*

In late 1997, the company undertook efforts to improve existing credit terms with its lenders. In December, management renegotiated terms of its financing facility with AT&T, reducing the interest rate paid and exchanging 207,964 shares for AT&T's 7.25% stake in the company's five subsidiaries.

e.spire has raised net proceeds of over \$420 million through high-yield debt and preferred share offerings in the last year and now has \$565 million face amount of debt and \$225 million worth of preferred shares outstanding. The secondary offering, completed March 30, 1998, raised approximately \$130 million and satisfied an obligation to preferred shareholders that would have increased the number of shares issueable under outstanding warrants had new equity capital not been secured. e.spire now has a debt-to-public equity ratio of approximately 50%.

The recent announcements concerning new expansion and the expectation of more to come could require e.spire to increase capital spending. The company is currently on a road show to raise \$175 million in high-yield debt. Successful completion of the transaction should fund the company through late 1999.

Our discounted cash flow analysis includes a 14% cost of capital, 9x estimated 2005 EBITDA terminal value and 20% public market discount. Based on these parameters and our projections for free cash flow, our analysis gives us a \$24 12-month price target for e.spire shares, representing a 13% premium over the recent share price of \$21 9/32.

e.spire's market capitalization of \$1.7 billion makes it the fifth largest of the still independent public CLECs. It currently trades at 6.1x our estimate of 1999 revenues, compared with 4.5x for the group. The company's enterprise value-to-gross PP&E multiple of 5.1x is also higher than the group average of 4.2x. We feel comfortable with these levels given e.spire's rapid, high-quality revenue growth and first-rate management team, and believe the continued successful completion of the company's business plan could push them higher over time.

### **Conclusion**

We believe e.spire is one of the best-positioned CLECs in the industry and that it offers shareholders significant upside potential. The company's expansion into new Tier I and Tier II markets will allow it to take full advantage of the favorable economics of its current product lines. The new management has taken on the challenge of becoming a customer-focused full-service telecommunications provider, investing in sales and support infrastructure that will differentiate the company from the incumbent operators.

However, e.spire's high percentage of resold lines and substantial funding requirements, combined with the higher-than-average multiples at which the company trades, temper our enthusiasm for the stock. Over the next six to 12 months, we believe e.spire's goal of becoming a national provider of integrated services will be better understood by the market and its consistently improving results will help investors recognize the company as one of the high-quality CLECs and an excellent long-term investment.

Figure 39

**e.spire statement of operations**

(US\$ in millions)	1998E	1999E	2000E	2001E	2002E	2003E	2004E	2005E
Data and Internet	\$47.8	\$90.9	\$159.0	\$254.4	\$381.6	\$534.3	\$721.3	\$937.7
Switched	57.8	148.2	240.8	334.5	426.0	503.4	585.3	663.3
Special Access	36.6	38.5	40.4	42.4	44.5	46.8	49.1	51.6
Other	6.6	6.6	7.3	8.0	8.8	9.7	10.6	11.7
Total Revenue	\$148.9	\$284.1	\$447.5	\$639.3	\$860.9	\$1,094.1	\$1,366.3	\$1,664.3
% growth	152.3%	90.8%	57.5%	42.9%	34.7%	27.1%	24.9%	21.8%
Cost of Sales	98.9	155.4	220.9	297.8	387.8	468.7	577.1	715.1
% sales	66.4%	54.7%	49.4%	46.6%	45.0%	42.8%	42.2%	43.0%
GM	\$50.0	\$128.7	\$226.6	\$341.5	\$473.1	\$625.4	\$789.2	\$949.2
% sales	34%	45%	51%	53%	55%	57%	58%	57%
SG&A	86.2	105.1	134.3	179.0	223.8	273.5	327.9	399.4
% sales	57.9%	37.0%	30.0%	28.0%	26.0%	25.0%	24.0%	24.0%
EBITDA	(\$36.3)	\$23.6	\$92.4	\$162.5	\$249.3	\$351.9	\$461.3	\$549.8
%sales	-24%	8%	21%	25%	29%	32%	34%	33%
D&A	38.4	51.6	61.6	71.6	81.6	89.1	96.6	104.1
Non-cash compensation	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0
EBIT	(\$77.8)	(\$31.0)	\$27.8	\$87.9	\$164.7	\$259.8	\$361.7	\$442.7
% sales	-52%	-11%	6%	14%	19%	24%	26%	27%
Interest, net and other	(50.7)	(95.6)	(112.4)	(134.8)	(133.9)	(136.2)	(134.7)	(130.5)
Pre-tax income	(\$128.6)	(\$126.6)	(\$84.6)	(\$46.8)	\$30.8	\$123.6	\$227.0	\$312.2
Tax expense	-	-	-	-	-	-	-	-
Net Loss	(\$128.6)	(\$126.6)	(\$84.6)	(\$46.8)	\$30.8	\$123.6	\$227.0	\$312.2
Preferred Stock	27.2	31.3	35.5	40.1	45.4	51.4	58.1	65.8
Net Loss per common sha	(\$155.7)	(\$157.9)	(\$120.1)	(\$86.9)	(\$14.6)	\$72.3	\$168.9	\$246.4
EPS	(\$3.53)	(\$3.30)	(\$2.46)	(\$1.74)	(\$0.29)	\$1.39	\$3.19	\$4.57
Weighted Avg. Shares	44.1	47.9	48.9	49.8	50.8	51.9	52.9	54.0
EBIT*(1-t)	(\$77.8)	(\$31.0)	\$27.8	\$87.9	\$164.7	\$259.8	\$361.7	\$442.7
Plus: D&A	38.4	51.6	61.6	71.6	81.6	89.1	96.6	104.1
Less: capex	209.4	250.0	200.0	200.0	200.0	150.0	150.0	150.0
Less: changes in working	0.8	4.1	4.9	5.8	6.6	7.0	8.2	8.9
= Free Cash Flow	(\$249.5)	(\$233.5)	(\$115.5)	(\$46.3)	\$39.6	\$191.9	\$300.1	\$387.8

Source: PaineWebber estimates and company published data.

Figure 40

**e.spire sources and uses of cash**

(US\$ in millions)	1998E	1999E	2000E	2001E	2002E	2003E	2004E	2005E
<b>USES OF FUNDS</b>								
Acquisitions	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Capital expenditures	209.4	250.0	200.0	200.0	200.0	150.0	150.0	150.0
Changes in working capital	0.8	4.1	4.9	5.8	6.6	7.0	8.2	8.9
Operating deficit	36.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Interest	33.9	60.9	78.9	120.7	136.9	136.9	136.9	136.9
Preferred dividends	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Uses</b>	<b>\$280.3</b>	<b>\$314.9</b>	<b>\$283.8</b>	<b>\$326.5</b>	<b>\$343.5</b>	<b>\$293.9</b>	<b>\$295.0</b>	<b>\$295.8</b>
<b>SOURCES OF FUNDS</b>								
Debt	\$0.0	\$300.0	\$200.0	\$200.0	\$0.0	\$0.0	\$0.0	\$0.0
Equity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Operating surplus	0.0	23.6	92.4	162.5	249.3	351.9	461.3	549.8
Cash interest	8.3	1.5	1.8	2.0	3.0	0.7	2.2	6.4
<b>Total Sources</b>	<b>\$8.3</b>	<b>\$325.1</b>	<b>\$294.1</b>	<b>\$364.5</b>	<b>\$252.3</b>	<b>\$352.6</b>	<b>\$463.5</b>	<b>\$556.2</b>
Cash (bop)	332.7	60.7	70.9	81.3	119.4	28.1	86.8	255.3
Change in Cash	(272.0)	10.2	10.3	38.1	(91.3)	58.7	168.4	260.4
<b>Cash (eop)</b>	<b>\$60.7</b>	<b>\$70.9</b>	<b>\$81.3</b>	<b>\$119.4</b>	<b>\$28.1</b>	<b>\$86.8</b>	<b>\$255.3</b>	<b>\$515.6</b>
Debt (eop)	\$488.8	\$819.9	\$1,055.2	\$1,265.0	\$1,265.0	\$1,265.0	\$1,265.0	\$1,265.0

Source: PaineWebber estimates.

Figure 41

**e.spire discounted cash flow analysis**

(US\$ in millions)	1998E	1999E	2000E	2001E	2002E	2003E	2004E	2005E
EBITDA	(\$36.3)	\$23.6	\$92.4	\$162.5	\$249.3	\$351.9	\$461.3	\$549.8
FCF	(249.5)	(233.5)	(115.5)	(46.3)	39.6	191.9	300.1	387.8
Discount Rate	14.0%							
PV of FCF, 1999-2004	(69.5)							
Terminal Value							\$4,948.0	
PV of Terminal Value	2,406.9							
Enterprise Value	\$2,337.4							
Debt, net	(417.8)							
Private Equity Value	\$1,919.6			Current Price		\$21.3		
Public Market Discount	20%			Target Price		\$24		
Public Equity Value	\$1,535.7			Target Return		13%		
Share o/s (f.d.)	65.0							
Target Price	\$24							

Source: PaineWebber estimates.

Figure 42

**e.spire valuation sensitivity analysis**

		Public equity value with 20% public market discount				
2005 Exit multiple		8.0x	8.5x	9.0x	9.5x	10.0x
Discount rate	13.0%	\$22	\$23	\$25	\$27	\$29
	13.5%	\$21	\$23	\$24	\$26	\$28
	14.0%	\$20	\$22	\$24	\$25	\$27
	14.5%	\$20	\$21	\$23	\$24	\$26
	15.0%	\$19	\$21	\$22	\$24	\$25

Source: PaineWebber estimates.

Figure 43

## e.spire balance sheet

(US\$ in millions)	1997	1998E	1999E	2000E	2001E	2002E	2003E	2004E	2005E
Cash and equivalents	\$260.8	\$60.7	\$70.9	\$81.3	\$119.4	\$28.1	\$86.8	\$255.2	\$515.6
Restricted cash	26.5	28.1	15.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts receivable	15.5	36.7	66.2	98.1	140.1	188.7	239.8	299.5	364.8
Other current assets	6.1	10.4	17.0	17.9	19.2	17.2	10.9	13.7	16.6
Total Current Assets	\$309.0	\$136.0	\$169.2	\$197.3	\$278.7	\$234.0	\$337.6	\$568.4	\$897.0
PP&E, net	250.5	421.4	619.9	758.3	886.7	1,005.2	1,066.1	1,119.5	1,165.5
Deferred financing fees	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intangibles	8.1	7.3	6.5	5.7	4.9	4.1	3.3	2.5	1.7
Restricted cash	45.4	17.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other assets	0.9	3.0	5.7	9.0	12.8	17.2	21.9	27.3	33.3
Total Assets	\$638.9	\$593.0	\$812.6	\$979.2	\$1,189.5	\$1,260.5	\$1,417.9	\$1,704.1	\$2,080.9
Notes payable	0.4	0.5	0.8	1.1	1.3	1.3	1.3	1.3	1.3
Accounts payable	18.3	37.2	56.8	67.1	63.9	68.9	76.6	82.0	83.2
Accrued interest	15.7	26.8	31.3	35.8	19.2	17.2	16.4	20.5	25.0
Other accrued liabilities	2.3	3.0	2.8	4.5	6.4	8.6	10.9	13.7	16.6
Total current liabilities	\$36.8	\$67.5	\$91.7	\$108.5	\$90.8	\$96.0	\$105.2	\$117.4	\$126.1
Notes payable	460.8	488.8	819.9	1,055.2	1,265.0	1,265.0	1,265.0	1,265.0	1,265.0
Other liabilities	0.5	1.5	2.8	4.5	6.4	8.6	10.9	13.7	16.6
Dividends payable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Liabilities	\$498.1	\$557.7	\$914.5	\$1,168.1	\$1,362.2	\$1,369.6	\$1,381.1	\$1,396.1	\$1,407.7
Redeemable options	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Redeemable Preferred Stock	55.1	68.4	77.3	87.5	99.0	112.1	126.8	143.5	162.4
Junior Redeemable Preferred Stock	150.1	169.8	192.2	217.5	246.1	278.5	315.1	356.6	403.5
Total stockholders' equity	(\$65.4)	(\$202.9)	(\$371.4)	(\$493.9)	(\$517.8)	(\$499.6)	(\$405.1)	(\$192.0)	\$107.3
Total Liabilities and SE	\$638.9	\$593.0	\$812.6	\$979.2	\$1,189.5	\$1,260.5	\$1,417.9	\$1,704.1	\$2,080.9

Source: PaineWebber and company published data.

Figure 44

## e.spire quarterly income statement

(US\$ in millions)	1Q97	2Q97	3Q97	4Q97	1997	1Q98	2Q98E	3Q98E	4Q98E	1998E	1999E
Data and Internet	\$3.1	\$4.6	\$5.3	\$8.0	\$21.0	\$9.3	\$11.0	\$12.8	\$14.8	\$47.8	\$90.9
Switched	0.0	0.6	1.9	5.5	8.0	8.3	11.6	16.2	21.8	57.8	148.2
Special Access	4.7	5.7	7.2	8.2	25.8	8.5	8.9	9.4	9.8	36.6	38.5
Other	0.5	0.8	1.7	1.4	4.4	1.3	1.5	1.8	2.0	6.6	6.6
Total Revenue	\$8.2	\$11.6	\$16.1	\$23.2	\$59.0	\$27.4	\$33.0	\$40.1	\$48.4	\$148.9	\$284.1
% growth	900.9%	621.5%	470.9%	454.2%	526.5%	235.1%	183.8%	149.9%	109.1%	152.3%	90.8%
Cost of Sales	8.7	9.4	10.6	20.2	48.8	19.3	23.8	26.7	29.1	98.9	155.4
% sales	106%	81%	66%	87%	83%	70%	72.3%	66.7%	60.1%	66.4%	54.7%
GM	(\$0.5)	\$2.3	\$5.4	\$3.0	\$10.2	\$8.1	\$9.1	\$13.4	\$19.3	\$50.0	\$128.7
% sales	-6%	19%	34%	13%	17%	30%	28%	33%	40%	34%	45%
SG&A	13.9	15.9	18.2	15.9	63.9	19.8	19.4	22.1	24.9	86.2	105.1
% sales	170%	137%	113%	69%	108%	72%	59.0%	55.0%	51.5%	57.9%	37.0%
EBITDA	(\$14.4)	(\$13.6)	(\$12.7)	(\$12.9)	(\$53.7)	(\$11.7)	(\$10.3)	(\$8.7)	(\$5.6)	(\$36.3)	\$23.6
% sales	-176%	-117%	-79%	-56%	-91%	-43%	-31%	-22%	-12%	-24%	8%
D&A	\$4.1	5.3	6.6	8.1	\$24.1	8.3	9.3	10.1	10.8	38.4	51.6
Non-cash compensation	0.2	0.6	0.5	3.0	4.3	1.6	0.5	0.5	0.5	3.1	3.0
EBIT	(\$18.8)	(\$19.6)	(\$19.9)	(\$23.9)	(\$82.1)	(\$21.5)	(\$20.1)	(\$19.2)	(\$16.9)	(\$77.8)	(\$31.0)
% sales	-230%	-168%	-124%	-103%	-139%	-79%	-61%	-48%	-35%	-52%	-11%
Interest, net and other	(5.2)	(6.1)	(10.1)	(11.4)	(32.9)	(10.6)	(12.8)	(13.3)	(14.0)	(50.7)	(95.6)
Pre-tax income	(\$24.0)	(\$25.7)	(\$30.0)	(\$35.4)	(\$115.0)	(\$32.2)	(\$32.9)	(\$32.5)	(\$30.9)	(\$128.6)	(\$126.6)
Tax expense	-	-	-	-	-	-	-	-	-	-	-
Net Loss	(\$24.0)	(\$25.7)	(\$30.0)	(\$35.4)	(\$115.0)	(\$32.2)	(\$32.9)	(\$32.5)	(\$30.9)	(\$128.6)	(\$126.6)
Preferred Stock	1.0	0.1	2.5	8.0	11.6	8.5	6.6	6.8	5.2	27.2	31.3
Net Loss per common sha	(\$25.0)	(\$25.8)	(\$32.5)	(\$43.4)	(\$126.6)	(\$40.7)	(\$39.6)	(\$39.4)	(\$36.1)	(\$155.7)	(\$157.9)
EPS	(\$3.19)	(\$0.92)	(\$0.90)	(\$1.18)	(\$4.65)	(\$1.08)	(\$0.85)	(\$0.84)	(\$0.76)	(\$3.53)	(\$3.30)
Weighted Avg. Shares	7.9	28.0	36.2	36.9	27.2	37.7	46.5	47.0	47.4	44.1	47.9

Source: PaineWebber and company published data.

## Electric Lightwave

Rating: Neutral

## Highlights

- We initiated coverage of ELI with a Neutral rating. Problems with the company's provisioning systems combined with uncertainty surrounding the effects of the Citizens Utilities breakup has convinced us to take a "wait and see" approach on ELI shares.
- The company is well positioned in four western markets and recently deployed switches in two more. While this "cluster" strategy allows the company to better leverage network assets, it has restrained the company's push into new markets and may have effected its ability to grow access lines.
- ELI's extensive local networks and data service capabilities give the company an extremely attractive asset base that would appeal to potential acquirers. However, Citizens' 83% ownership stake in ELI clouds the issue of whether ELI should be considered a takeover candidate.
- At 1.9x gross PP&E, ELI trades at a substantial discount to the group's 4.2x multiple despite the company's extensive local markets built inexpensively in conjunction with local utilities. ELI's enterprise value to estimated 1999 revenue multiple of 4.4x is roughly equivalent to the group's. However, we believe uncertainty concerning the company's performance over the next two or three quarters justifies investor caution and a conservative multiple.

7/16 price \$11 3/4 OTC—ELIX 52-week range \$10 5/8 - 23 1/8

FY December	1997	1998E	1999E
Q1	\$(0.24)	\$(0.24)	—
Q2	(0.23)	(0.39)	—
Q3	(0.14)	(0.46)	—
Q4	(0.18)	(0.53)	—
Year	\$(0.80)	\$(1.62)	\$(2.36)
P/E	—	—	—
Div	—	—	—
Yield	—	—	—
Secular Growth Rate	40%		

**Company description:** Electric Lightwave is a facilities-based CLEC providing voice and data services to medium and large business customers in the western United States.

## Overview

ELI was founded by Citizens Utilities in 1991 as a competitive access provider. By leveraging existing fiber and substantial rights of way, ELI provided competitive access to large businesses in the Northwest United States. Its customers included Boeing, Intel and Hewlett-Packard. Citizens continues to own approximately 83% of the common stock of the company, and almost 98% of the voting interest.

The company's CAP roots are evident in its current strategy of providing facilities-based local exchange service over its own end-to-end networks. At the end of the first quarter of 1998, the company had over 41,000 access lines<sup>3</sup> in service in four major markets. Switches were recently deployed in Phoenix and Boise, bringing the number of the company's market clusters to six.

ELI's revenues have doubled every year since 1993, reaching \$61 million in 1997. Access line growth, however, has been spotty. In the first quarter of 1997, the company added 5,892 lines, while in the first quarter of 1998 it added 6,942 lines. This is not the rapid growth in net adds we expect to see in the CLEC industry. On July 13, the company announced that provisioning problems that had effected first quarter results would spill into the rest of the year.

On May 18, Citizens announced its intention to split itself into two separate entities. The plan calls for the formation of a new company that will hold all of the telecommunications assets and Citizens' interest in Electric Lightwave. Citizens' management expects the split to occur within the next 12 months.

## Investment case

*Solid positioning in four market clusters in the western United States.* With the deployment of two switches in the second quarter and an additional switch planned for the second half of the year, ELIX is expected to offer switched service in seven market clusters by the end of 1998.

The company has a focused strategy to build density in its existing markets through internal growth. This leverages the company's infrastructure by serving the surrounding areas with the same switch, resulting in higher line counts,

<sup>3</sup>ELI counts trunk lines as 2.5 access lines.

improved gross margins and potentially more compelling returns on invested capital. However, this approach may constrain the company's long-term growth rate relative to that of other CLECs. While other players of ELI's size are rapidly expanding into new major markets, ELI has been largely focussed on building in and around existing markets.

**Attractive revenue mix.**—Ninety-three percent of the company's 41,270 access lines are on-switch and 70% of these access lines ride the company's own fiber into the customer building. This will provide ELI with high gross margins in its switched local business as the company's networks mature. Gross margins for services delivered entirely over a CLEC's own facilities generally range from 70% to 80%.

Data and Internet revenues rose 22% sequentially in the first quarter of 1998. We expect double-digit sequential growth of data and Internet revenues to continue for the next four to six quarters as the company expands into new markets. High-margin services, including local, enhanced and dedicated services, represent over 90% of total company revenues.

**Overhang from the Citizens Utilities spin-off.**—We believe investors will sit on the sidelines and await more information regarding the outcome of the Citizens Utilities reorganization. As details concerning the management and reporting structure of the telecommunications entity, the composition of the new board and its degree of independence from Citizens are released, investors will get a better idea of the transaction's effect on the company. Until this time, we expect ELI to trade in a fairly narrow range.

**Valuation.**—A comparison of the company's revenue and gross PP&E multiples with industry averages tells a mixed story. ELI trades at a 1.9x enterprise value to gross PP&E multiple versus 4.2x for the group. Digging deeper, we find the disconnect to be even more severe considering portions of ELI's network have been built in conjunction with local utilities. The arrangement lowers the cost of deployment and gives ELI a bigger bang for its cap ex buck. The 1.9x PP&E figure also appears low relative to the prices agreed to in the acquisitions of Teleport and Brooks Fiber, which equate to PP&E multiples in excess of 5.0x.

In terms of revenue multiples, ELI trades at a market multiple of revenues estimated for both 1998 and 1999. Considering the uncertainty surrounding the company's ability to grow and its distant EBITDA breakeven, we do not believe a premium multiple is warranted at this time.

## Strategic assessment

**Network strategy**—ELI is building SONET rings in targeted markets and extending them into surrounding areas with a high penetration of business customers. This increases the company's presence in lucrative but less competitive areas, makes its services more attractive to customers with a number of citywide locations and allows it to terminate a greater percentage of traffic on its own facilities.

Figure 45

### ELI local fiber installations

Local Markets	Date Operational
Portland	1991
Seattle	1991
Salt Lake City	1994
Sacramento	1994
Phoenix	1995

Source: PaineWebber and company published data.

ELI's clustering strategy allows it to use one switch to serve a large area instead of installing high-cost switches in a number of underpenetrated markets. This approach contrasts with the strategies of many other leading CLECs that are entering new markets seemingly on a daily basis. For example, ELI had installed only five voice switches at the end of the first quarter of 1998, compared with 17 for e.spire and 14 for GST. The resulting differences in network density can be seen in a comparison of the number of on-net access lines per switch for each carrier.

Figure 46

### Network density statistics

Statistics as of 1Q98	Local Switches Installed	On-net Lines per Switch	Estimated Revenue per Switch/mo.
ICIX	13	4,928	\$271,040
ICGX	20	4,950	\$272,250
NXLK	11	6,224	\$342,320
ESPI	17	848	\$46,615
GSTX	14	2,809	\$154,510
ELIX	5	8,006	\$440,351

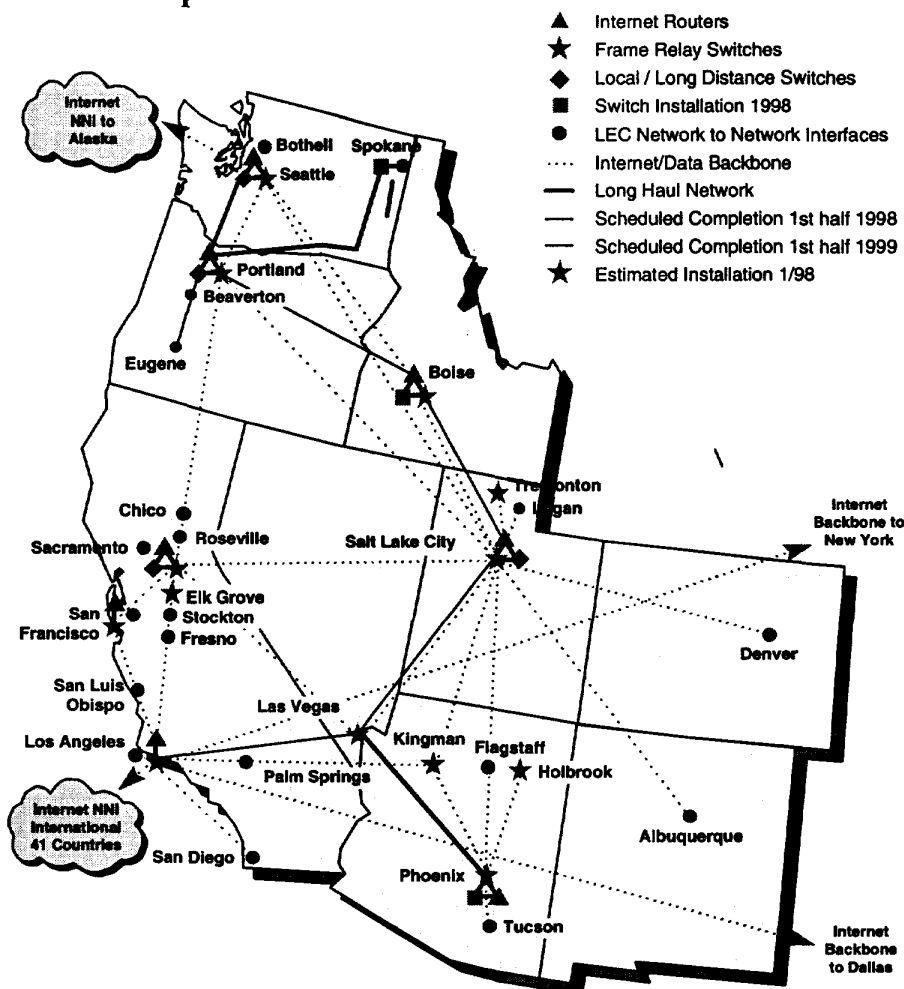
Note: ICIX does not include six LD only switches.

NXLK does not include LD only or test switches.

Source: PaineWebber estimates and company data.

Figure 47

## ELI network map



Source: Electric Lightwave.

These statistics were compiled by taking each company's reported percentage of on-network access lines multiplied by the total number of access lines in service divided by the number of local switches in service at the end of the first quarter of 1998. Using this methodology, ELI has the most lines per switch, indicating that it is generating the highest return on each dollar invested in switching infrastructure. However, this analysis does not adjust the number of access lines for certain multiples applied by carriers such as GST, Intermedia and ELI.

To illustrate the financial effects, assume each line generates roughly \$55 per line per month. This equates to revenues of over \$440,000 in local service revenue per switch per month for ELI but only \$154,000 for GST and \$47,000 for e.spire. Furthermore, as 97% of ELI's access lines are completely on-net, ELI takes home a greater percentage of these revenues in the form of gross margin. For

simplicity, if we assume 40% gross margin on switched service across the board, ELI gets payback in roughly two and one-half years on a \$5 million installed Class 5 switch with a depreciable life of five years. This compares with other service providers whose payback period is considerably longer based on their current number of access lines per switch.

Figure 48

## Implications for return on investment

Statistics as of 1Q98	GM per switch/mo.	Est. cost of switch	Payback period (mos.)	Payback period (yrs.)
ICIX	\$108,416.0	\$5,000,000	46.1	3.8
ICGX	\$108,900.0	\$5,000,000	45.9	3.8
NXLK	\$136,927.9	\$5,000,000	36.5	3.0
ESPI	\$18,646.0	\$5,000,000	268.2	22.3
GSTX	\$61,804.2	\$5,000,000	80.9	6.7
ELIX	\$176,140.4	\$5,000,000	28.4	2.4

Source: PaineWebber estimates and company data.



The number of the company's collocated COs and on-net lines per CO further emphasizes the company's conservative strategy. At first quarter 1998, ELI had 23 collocations, compared with 133 for e.spire, 67 for GST and 50 for Intermedia. However, ELI has the most lines per CO—at over six times the number for GST and 16 times that of e.spire. To us this indicates management's efforts to fully exploit existing opportunities before investing new money in search of new markets.

The other side of the coin in this analysis is line growth. While ELI's approach maximizes leverage on existing infrastructure, line growth suffers. Many CLECs are growing their base of operations to take advantage of the fact that 40-50% of the market share has essentially been put up for grabs by the Telecommunications Act.

While the installation of new switches and collocation at new sites will lower line averages and hurt gross margins in the near term, these companies are moving fast in an attempt to capture as much of the pie as possible. These carriers share the belief that the economics that have made the local market an attractive place to do business in the past will continue to exist when the market becomes saturated and growth slows. While this approach involves more risk, it increases the potential payoff down the road, and we believe it makes sense from a return-on-capital standpoint.

There are signs, however, that management may be changing its tune. The company recently installed new switches in Phoenix and Boise and has plans for an additional switch in Spokane in the third quarter. In the first quarter, management announced its intention to double the size of the sales force by year-end. It also expects to be collocated in 85 central offices by January 1.

We believe that further expansion of its planned switch deployment is likely and, considering the company's strong balance sheet, easily financeable. New markets that may appear attractive include San Francisco, Los Angeles, Tucson, San Diego, Albuquerque and Denver. The split with Citizens may also portend further acceleration of the company's growth if a new board looks at the business less like a regulated utility and more like the once-in-a-lifetime opportunity that we believe it to be.

The company's long-haul strategy involves constructing fully redundant SONET rings to interconnect its local markets. At this point, the company is farther along than GST in the construction process due to its early start and relationships with local utilities. These utilities install the fiber along side power lines using their own capital. ELI provides the electronics to light the fiber.

In the end, the utility keeps control over ten fibers while the company receives 48. The utility also receives 20-30% of wholesale revenue generated from the company's leased capacity contracts. Its fiber can only be used for its own purposes and cannot be resold on a wholesale or retail basis. ELI receives the benefit of improved time to market plus lower capital requirements. Additionally, ELI exploits the extensive rights of way these utilities have to buildings they provide with power, allowing the company to reach these buildings with fiber more cheaply.

In April, the company turned up its 569-mile route from Portland to Spokane. Its other owned routes in service include Phoenix to Las Vegas, and Portland to Seattle. By year-end 1999, the company expects to have SONET rings composed of owned and leased fiber connecting all of its major markets including Los Angeles, San Francisco, Las Vegas, Seattle and Portland, giving the company an impressive network, unmatched by its CLEC competitors in the West.

Figure 49

#### ELI's current and planned fiber routes

Long Haul Routes	Date		
	Operational	Miles	Strands
Phoenix - Las Vegas	1995	356	48
Portland - Seattle	1997	207	56
Portland - Spokane	1998	570	24
Portland - Eugene	1998E	140	60
Portland - Boise - - Las Vegas - L.A.	1999E	1620	24

Source: PaineWebber estimates and company data.

ELI will run OC-192 with 16-window WDM, providing it with 160 GHz of capacity per fiber. This capacity will allow the company to control its cost structure as competition heats up. The capacity is also a valuable currency that the company will exploit in fiber swaps with other carriers as it moves into new markets.

In March, the company announced a deal with the Bay Area Rapid Transit (BART) District to lease fiber capacity on a long-term basis. BART has fiber running throughout downtown San Francisco and the eastern Bay area. The company has opened a new sales office in San Francisco and will begin selling voice service in the third quarter.

*Leading with data*—ELI's ability to offer high-quality data products in attractive markets with its own infrastructure is a key strength. ELI's frame relay network is currently running 17 Cascade 9000 switches with 30 POPs located in 24 states throughout the West. The company's extensive use of NNIs connects its frame relay network with some of the largest providers in the country, including